Please answer all questions in the homework format listed on the website.

1) Dowling, Problem 7.3. (For this problem the state of stress is *generalized* plane stress, where $\sigma_z = \sigma_3 \neq 0$. You will first need to refer to Dowling, Section 6.2.4 to understand how *generalized* plane stress differs from ordinary plane stress in order to solve this problem.)

2) Dowling, Problem 7.11. Find safety factor for Tresca failure criterion only.

3) Dowling, Problem 7.31. Do part (a) only. Use Table 4.2. Find the diameter that is appropriate for von Mises failure criterion. Hint: Eq. 7.36 is much easier to work with for this problem.